

Amendments to the Claims

1. – 4. (Canceled)

5. (Currently Amended) The method of claim 4 11 further comprising selecting reagents from whichever of the ~~at least two~~ three servers has the ~~shorter~~ shortest backlog of demand with which to perform assays in the first ~~pattern~~ sub-group of assays.

6. (Withdrawn) An analytical analyzer adapted for automatically conducting a number of clinical assays on patient samples in reaction cuvettes, said analyzer comprising:

a rotating reaction carousel supporting a cuvette carousel having cuvette ports adapted to receive a plurality of reaction cuvettes suitable for conducting clinical assays therein, wherein each and every cuvette port is returned to an original starting position in said carousel in a full operational cycle time of the carousel:

at least two servers inventorying reagents required for performing said clinical assays:  
and

analyzer control means for performing a first pattern of assays in a first time period and a different second pattern of assays in a different second time period by duplicating reagents required to conduct a number of assays in the first pattern of assays within the at least two servers.

7. (Withdrawn) The analyzer of claim 6 wherein the first pattern of assays has a larger portion of a first group of assays and a smaller portion of a second group of assays and wherein the second pattern of assays has a larger portion of said second group of assays and a smaller portion of said first group of assays.

8. (Withdrawn) The analyzer of claim 7 wherein said first group of assays comprise assays that are completed in less than one half of said operational cycle time.

9. (Withdrawn) The analyzer of claim 8 wherein said second group of assays comprise assays that require more than one half of said operational cycle time to be completed.

10. (Withdrawn) The analyzer of claim 9 wherein said analyzer control means selects reagents from whichever of the at least two servers has the shorter backlog of demand with which to perform assays in the first pattern of assays.

11. (New) A method for increasing the throughput of an analyzer equipped for conducting a number of different assays on a clinical sample, the method comprising the steps of:

- (a) providing a source of samples to be assayed by the analyzer;
- (b) providing a reaction carousel having reaction cuvettes for containing the samples to be assayed;
- (c) providing first, second, and third sources of reagents for conducting reactions on the samples in the reaction cuvettes; and
- (d) partitioning the different assays to be conducted by the analyzer into
  - (i) a first sub-group of assays comprising those assays having the highest frequency of being conducted by the analyzer;
  - (ii) a third sub-group of assays comprising those assays having the lowest frequency of being conducted by the analyzer; and
  - (iii) a second sub-group of assays comprising those assays not contained in either the first or third sub-groups of assays,

wherein the first source of reagents contains reagents needed for conducting the first, second, and third sub-groups of assays, the second source of reagents contains only those reagents needed for conducting the first and second sub-groups of assays, and the third source of reagents contains only those reagents needed for conducting the first sub-group of assays.